## Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A process for the preparation of lactones by decomposition of a 1,2,4-trioxepane according to formula (I)

**(I)** 

wherein

R is H or CH<sub>3</sub>;

n is 1-14;

Rx independently is any substituent on the ring structure, including substituents which form bi- or tricyclic structures; and m is 0-34.

- 2. (Original) A process for the preparation of lactones according to claim 1 comprising the steps of
  - (a) heating a small amount of a suitable medium to the temperature at which the 1,2,4-trioxepane decomposes, and
  - (b) subsequently adding said 1,2,4-trioxepane to the preheated amount of medium while controlling the reaction temperature.

- 3. (Original) A process for the preparation of lactones according to claim 2 wherein the medium is a linear or branched alkane solvent, preferably selected from the group consisting of nonane, decane, undecane, dodecane, paraffin oil, Isopar<sup>®</sup> solvents, and Shellsol<sup>®</sup> solvents.
- 4. (Original) A process for the preparation of lactones according to claim 3 wherein the solvent comprises an Isopar<sup>®</sup> solvent, preferably Isopar<sup>®</sup> H.
- 5. (Currently Amended) A process for the preparation of lactones according to any one of the preceding claims claim 1 wherein the small amount of medium is between 0.01 and 1.5 parts by weight of medium per part of 1,2,4-trioxepane starting material.
- 6. (Currently Amended) A process for the preparation of lactones according to any one of the preceding claims claim 1 wherein the 1,2,4-trioxepane is added in the pure form if it is a liquid at room temperature, or in the molten state or dissolved in a minimum amount of a suitable solvent if it is a solid at room temperature.
- 7. (Currently Amended) A process for the preparation of lactones according to any one of the preceding claims \_ claim 1 wherein the 1,2,4-trioxepane is a reaction product of hexyleneglycol hydroperoxide or isopreneglycol hydroperoxide with a compound selected from the group consisting of cyclobutanone, cyclopentanone, cyclohexanone, cyclohexanone, cyclohexanone, cyclohexanone, cyclohexanone, cyclodecanone, cyclodecanone, cyclodecanone, cyclohexadecanone, cyclohexad

hexanone, menthone, 2-methylcyclohexanone, 3-methylcyclohexanone, 2-phenylcyclohexanone, 3,3,5,5-tetramethylcyclohexanone, 2,6-dimethylcyclohexanone, bicylo[3.2.1]octan-2-one, 2 B-cyanoethylcyclohexanone, 4-ethylcyclohexanone, bicyclo[3.3.1]nonan-9-one, dihydrocarvone, 2-t-butylcyclohexanone, 3,3,5-trimethylcyclohexanone, 6-carbethoxy-2,6,6-trimethylcyclohexanone, 2,6,6-trimethylcyclohexanone, 2-ethoxycyclohexanone, 2,2,6,6-tetramethylcyclohexanone, 3-methylene-2-norbornanone, pulegone, and ethyl 2-oxo-1-cyclooctanecarboxylate.

8. (Currently Amended) A process for the preparation of lactones according to any one of the preceding claims claim 1 wherein the reaction temperature is maintained between 100 and 300°C.